OWNER'S MANUAL

xtant :: P500

XTANT TECHNOLOGIES INCORPORATED

xtant :: P500

x•tant

x•tant (ikst`ænt, e`kstent) 1. *adj.* still in existence, especially. of **enduring excellence.** ‖e.g. *of xtant quality that stands the test of time and the passing of fads.* 2. *adj.* Standing out or above, as in **outstanding**, the quality or state of being **original**. [from. L. xstans (xstantis) n present participle of xstare, to stand forth. ‖ Second origin; Prescott AZ. U.S.A. Ntl. Frst. Cmp. 1994 *v.* to xtantify = to stand up and be heard] 3. *noun* /XTANT **applied creativity** esp. *a company of people united to apply original thinking to continually advance the spectrum of extraordinarily* ***vivid sound reproduction***, to apply innovative thought and action to questions previously considered resolved. ‖

Xtant Technologies
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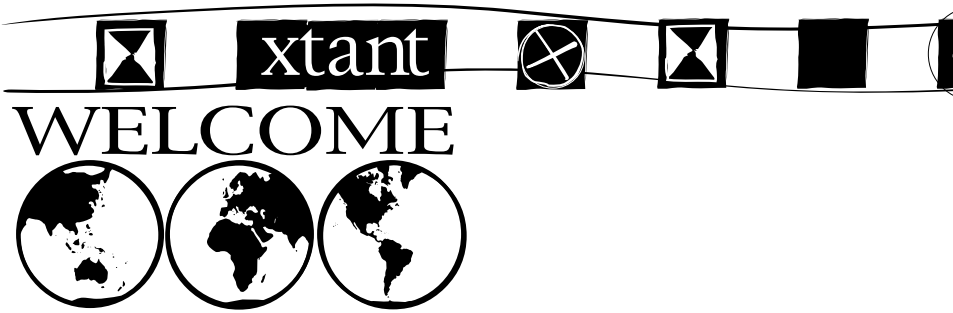

WELCOME

We would like to personally thank you for choosing Xtant Technologies equipment. Our mission is to continually provide you with the best mobile audio – anywhere. Our goal is to exceed your expectations. Our driving concepts are superiority through simplicity, flexibility, compatibility, reliability, efficiency, and ease of system expansion. We began with a clean slate. We challenged all the assumptions. We enlisted a dream team of audio specialists; manufacturers, installers, designers and audiophiles. We all became excited about the possibilities. We listened. We are still listening.

***We Listen** to your recommendations, opinions, and needs.*

***We Listen** to our fellow supporting manufacturers to ensure that our products interface well with a wide variety of products.*

***We Listen** to our equipment with sensitive and critical ears to provide the finest mobile audio components on the planet.*

We have created Xtant because we respect the music, and the people who want to really listen. The result has expanded the expectations of extraordinarily vivid mobile audio. Vivid mobile audio, a continuing evolution of the art of listing and hearing, well. We believe that music deserves the maximum accuracy in reproduction. We have united the art of the technology and the technology of the art to create the magic. Xtant is only available through the finest specialized mobile audio retailers. Your Xtant Select Dealer was chosen by us because of their passion for excellence and their commitment to expanding their expertise. Please remember, exceptional audio requires professional installation. Your Xtant Dealer will optimize your system and your level of satisfaction.

Whether you are a professional competitor in auto sound or a privately passionate connoisseur of fine music, we salute you, and appreciate your investment in quality mobile audio. If you have a problem or a suggestion please give us a call or write us. Thanks for having the faith in the music and the faith in us.

We look forward to a long and enduring relationship!

Welcome to Xtant!

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xtant :: P500

The P500 is a 4 channel, fully adjustable, five band parametric equalizer featuring an on-board noise gate and selectable balanced line inputs. The three rotary potentiometers per band perform three simple functions which provide quick and accurate tuning adjustments. The function of each potentiometer is detailed below:

CUT / BOOST: The gain has a swing adjustment from – 18 dB to + 18 dB as indicated by full clockwise rotation.

FREQUENCY ADJUSTMENT: The position of this potentiometer determines the center frequency selected for adjustment. Each band of equalization has a range of center frequencies from 20 Hz to 20 KHz.

"Q" / BANDWIDTH ADJUSTMENT: Rotation of this control allows the user to vary the bandwidth or "Q" from a value of 1 to 10.

ADJUSTING THE P500

The P500 is designed to be "set-up" or "tuned" with the aid of a *Real Time Spectrum Analyzer* measuring a pink noise signal generated by the mobile audio system. The analyzer provides visual feedback when following these simple steps.

With the system playing pink noise, turn on the RTA and adjust pink noise SPL to 85 – 90 dB.

Perform the following steps per band:

Select the frequency range to be adjusted and place the *frequency range jumper* in the appropriate position.

Turn the boost / cut control to +18 dB (full clockwise rotation). This will show the present center frequency and "Q" settings on the analyzer.

Rotate frequency control to the frequency you wish to adjust.

Adjust "Q" setting to match the width of the dip or peak you are addressing.

Finally, adjust the gain control to achieve the desired response curve.

This is a simple, quick, and effective method for precise equalization.

XTANT P500 SPECIFICATIONS

Type of Equalization	5 Band Parametric
Number of Channels	4 Front input is linked to 3 bands of equalization. Rear input is linked to 2 bands of equalization. All 5 bands are available at the rear outputs in 2 channel mode.
Frequency Response	10 Hz to 50 KHz +/– 1dB
Range of Center Frequencies per Band	20 Hz – 20 KHz
Bandwidth Adjustment	Q from 1 to 10
Boost / Cut	+ /– 18 dB
Distortion (THD)	< .04%
Signal to Noise Ratio	> 100 dB
Balanced Line Input:s	Yes
Input Sensitivity	100 mV to 8.5 V RMS Unbalanced Source 100 mV to 17 V RMS Balanced Source
Input to Output Gain:	0 dB +/– 20 dB, 10 dB steps
On-Board Noise Gate:	Yes
Power Supply:	Fully Regulated, PWM
Fusing	1 Amp
Dimensions	9.9 x 9.9 x 1.7 inches
Warranty	Limited 4 year Parts and Labor

SEE PAGE 7 OF THIS MANUAL FOR COMPLETE DETAILS

CUSTOMER RELATIONS
TECHNICAL SERVICES

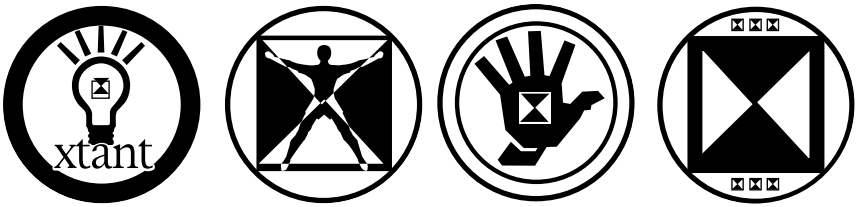
STATEMENT OF PURPOSE

Our customer's satisfaction is our purpose. You represent our present and our future. It is our goal to create and nurture relationships based upon trust and respect. This commitment is not taken lightly or just for today; it is our way of doing business. We believe there is no other way.

Xtant's policies and procedures are designed, in the event of a problem, to minimize the amount of your "down-time" and inconvenience. It is our commitment that the product will be at our facility for no more than four (4) days. Please consider weekends or holidays (which may fall within the time period) when estimating the return date of serviced product.

For technical assistance and information regarding products and/or installation, please contact Xtant's Customer Relations Department from 8:00 am to 5:00 pm MST– Monday thru Friday at:

PHONE:	**(602) 431 8686**
FAX:	**(602) 431 8600**
U.S.A. TOLL FREE:	**(888) 449 8268**



LIMITED U.S.A. WARRANTY

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Xtant Technologies (Xtant) warrants its products to be free from defects in materials and workmanship under normal use and service when the unit is installed by an Authorized Xtant Dealer as folows: electronics (4) four years from original purchase date; speakers/sub-woofers (3) three years from original purchase date. Non-Authorized Dealer installed products carry a one (1) year parts and labor limited warranty. The extent and conditions of Xtant's Limited Warranty are as follows:

1. Authorized Xtant Dealer Installed Products: Xtant will repair at no charge, to the original purchaser, any unit which Xtant's examination discloses to be defective and under warranty, provided the defect occurs within the warranty period and the product is returned immediately to Xtant. This warranty is not transferable.

2. Non-Authorized Xtant Dealer Installed Products: Xtant will repair at no charge, to the original purchaser, any unit which Xtant's examination discloses to be defective and under warranty, provided the defect occurs within one (1) year from the date of purchase and the product is returned immediately to Xtant. This warranty is not transferable.

3. The date of purchase and proof of Authorized Dealer Installation of an Xtant product must be established by an original (or copy of the original) sales receipt which must accompany the article being returned for warranty work.

4. This warranty shall NOT apply to any Xtant unit found to have the original factory serial number removed or defaced. All products received (by Xtant) for in warranty or out of warranty repair, with their original serial numbers removed or defaced, will NOT be repaired and will be returned to sender, freight collect.

5. The provisions of this warranty shall not apply to any Xtant unit used for a purpose for which it is not designed, which has been repaired or altered in any way, or which has been connected, installed, or adjusted other than in accordance with the instructions furnished in Xtant's owner's manual. Nor shall this warranty apply to any part which has been subject to misuse, neglect, or accident.

6. Xtant does not authorize any other persons to assume any other liability in connection with its products. THIS WARRANTY IS THE ONLY EXPRESS WARRANTY MADE BY XTANT APPLICABLE TO ITS PRODUCTS. ANY IMPLIED WARRANTY OR MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO XTANT'S AMPLIFIERS AND OR ACCESSORIES IS LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY. XTANT SHALL NOT BE LIABLE FOR THE INCIDENTAL, CONSEQUENTIAL, OR COMMERCIAL DAMAGES RESULTING FROM THE BREACH OF THIS WRITTEN WARRANTY. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts; so the above limitations or exclusions may not apply to you.

7. Your unit will be serviced on an in-warranty basis within the warranty period for the correction of warranted defects. If improper operation of your Xtant product should occur, contact your Authorized Xtant Dealer for assistance with the return and factory repair of your Xtant product. If an Authorized Xtant Dealer is not available, please contact **Xtant's Customer Service Department for assistance.**

ELECTRONICS
Xtant Technologies
7676 South 46th Street
Phoenix, Arizona 85040
888-449-8268

SPEAKERS
Xtant Technologies
805 Woodman Ave.
Winslow, Il 61089
800-556-2888

TO RETURN XTANT PRODUCTS OUT OF WARRANTY: Contact Xtant's Warranty Department at (602) 431 8686 from 8:00 am to 5:00 pm (MST) for a Return Authorization Number. Return the unit, postage prepaid, in the original protective carton. Please include a description of the problem and, if desired, a request for an estimate of repair costs. Unless a request for an estimate is included, the unit will be repaired as necessary. Repaired unit will be returned with an itemized statement, C.O.D. certified or Visa/MC. Xtant provides a 90 day warranty on all repairs serviced as non-warranty units.

OWNER'S INSTALLATION LOG

Upon installation of your mobile audio sound system, your Authorized Xtant Select Dealer will complete this log. Keep this owners manual with your vehicle as a reference for all P500 settings.

OWNERS NAME:_____

VEHICLE:_____ YEAR:_____

XTANT P500 SERIAL # _____

MODES OF OPERATION: (CIRCLE SETTING)

INPUT MODE:	4 CHANNEL	2 CHANNEL
BALANCED LINE:	ENABLE	DISABLE
NOISE GATE:	ON	DEFEAT

P500 ADJUSTMENTS (DRAW POSITION OF CONTROL & CIRCLE FREQ. RANGE SELECTED)

FRONT "A"	FRONT "B"	FRONT "C"	REAR "A"	REAR "B"
FREQ. ADJUST	FREQ. ADJUST	FREQ. ADJUST	FREQ. ADJUST	FREQ. ADJUST
Q ADJUST	Q ADJUST	Q ADJUST	Q ADJUST	Q ADJUST
BOOST/CUT	BOOST/CUT	BOOST/CUT	BOOST/CUT	BOOST/CUT
FREQ. RANGE	**FREQ. RANGE**	**FREQ. RANGE**	**FREQ. RANGE**	**FREQ. RANGE**
20 – 200 HZ	20 – 200 HZ	20 – 200 HZ	20 – 200 HZ	20 – 200 HZ
200 – 2 KHZ	200 – 2 KHZ	200 – 2 KHZ	200 – 2 KHZ	200 – 2 KHZ
2K – 20 KHZ	2K – 20 KHZ	2K – 20 KHZ	2K – 20 KHZ	2K – 20 KHZ

XTANT SELECT DEALER:_____

PHONE:_____

INSTALLATION SPECIALIST:_____

DATE INSTALLED:_____